## **ABSTRACT**

An intermediate system provides remote clients with access to a primary system. The intermediate system creates and stores a log-in record for each client. The log-in record contains an encrypted primary system client identifier (PSCI) and a security scheme identifier (Security ID). The PSCI contains authentication information for verifying a client's right to access the primary system. The Security ID identifies the security scheme employed to secure information for a client's log-in process. intermediate system initially verifies a client's access rights using the security scheme identified by the Security ID and data provided by the client. Next, the intermediate system sends the PSCI to the client's primary system, which uses the PSCI to verify the client's access rights. When necessary, a security scheme update modifies values in the client log-in record. The update modifies values that depend on log-in data provided by the client, including modifications to the encrypted PSCI. Using the client's log-in data eliminates the need to separately request data from the client for security scheme updates.